

REMARKS/ARGUMENTS

Pending claims 1-11, 13, 14 and 16-32 stand rejected under 35 U.S.C. § 102(b) over U.S. Patent No. 5,353,059 (Lawlor). As to claim 1, Lawlor does not disclose identifying noise in a first portion of a video frame. In this regard, Lawlor analyzes a video frame by checking for data errors, not noise. *E.g.*, Lawlor, col. 7. These data errors are determined by analysis of error correction codes and, if an error exists, an error flag is set.

These data errors are not noise. That is, Lawlor discloses that digital signals are encoded using error correction and detection codes such that data errors occurring during transmission may be remedied. It is telling that nowhere in Lawlor is the term "noise" even used. The clear import is that data errors are not noise. Further, neither dictionary definition proffered by the Examiner indicates that such data errors can be considered noise. Thus claim 1 and claims 2-8 depending therefrom are patentable over Lawlor. For the same reasons, claims 9-11, 13, 14 and 16-32 are similarly patentable.

Dependent claim 2 is further patentable as Lawlor does not disclose associating a noise level with the first portion of a video frame and comparing the noise level to a predetermined value. In this regard, the portions cited by the Office Action (see Office Action, p. 4) merely indicate that a frequency range of a sub-band containing a data error is determined. This is not associating a noise level with a first portion of a video frame. Nor does unit 640 of Lawlor perform any comparing of a (non-existent) noise level to a predetermined value. In this regard, unit 640 merely determines whether to substitute a data element from a previous or next frame with the value of an existing frame. For this further reason, claims 2-8 are

patentable over Lawlor. For the same reason, claims 18-21 and 23-24 are further patentable.

Dependent claim 4 is further patentable as nowhere does Lawlor disclose performing a plurality of arithmetic operations between first and second values associated with first and second portions of a video image. In this regard, the portion of Lawlor cited by the Office Action merely states that based on the output of a lookup table, either an existing value of a video element is passed or a concealment value is passed: there is no performing of arithmetic operations between first and second values. Lawlor, 15:40-62. For this further reason, claim 4 and claim 5 depending therefrom are patentable over Lawlor. For the same reason claims 19 and 20 are further patentable.

For similar reasons, dependent claim 5 is further patentable as nowhere does Lawlor disclose that a current value (contended by the Office Action to meet this claim) is identified as a plurality of values associated with a first portion of a video frame.

With regard to dependent claims 7 and 8, nowhere does Lawlor disclose associating a predetermined value to either the type of video input signal or the type of noise in a video frame. In this regard, a spatial frequency range of a sub-band containing a corrupt element is not predicated on either a type of video input signal or the type of noise in a video frame. For this further reason dependent claims 7 and 8 are patentable. For the same reason claim 14 is further patentable.

With regard to independent claim 9, nowhere does Lawlor disclose a storage medium coupled to a bus that includes a software program that detects noise in a first portion of a video frame and replaces the first portion with a second portion of the frame. In this regard, the Office Action contends that

error flag analyzer 760 meets the claimed storage medium. Office Action, p. 6. Applicants respectfully disagree, as Lawlor discloses that error flag analyzer 760 is a programmable read-only memory that acts as a look up table; it merely outputs data values based on addresses provided to its input. For this further reason, claims 9-15 are is patentable. For the same reasons, claims 16-24 are patentable.

Independent claim 25 is further patentable over Lawlor, as Lawlor does not disclose analyzing two portions of a video frame with two different adjacent portions to obtain two different results. In this regard, the Office Action contends that both of these claimed elements are met by a current element and surrounding elements. Office Action, p. 8. However nowhere does Lawlor disclose that any analyzing between adjacent portions is done. Further, these surrounding elements are sub-band components of the same frequency, and not adjacent portions. Nor does Lawlor disclose replacing the first portion with one of a second portion or two different adjacent portions if a comparison between first and second results indicates noise. This is so, at least because there are no first and second results obtained in Lawlor.

Dependent claim 26 is further patentable as nowhere does Lawlor disclose analyzing different portions of a video image where each of the portions comprises a plurality of units and the analyzing is performed on a unit by unit basis. For this further reason claims 26-29 are further patentable.

For similar reasons claim 27 is further patentable as nowhere does Lawlor disclose calculating a threshold based upon an amount of plurality of units per a respective portion of a video frame. In this regard, the threshold level referred to by the Office Action (Office Action, p. 8) merely receives an error

value; it does not calculate a threshold as above. For this further reason claims 27-29 are further patentable.

Dependent claim 28 is further patentable as nowhere does Lawlor disclose calculating a sum of absolute differences between two groups of adjacent portions of a video frame. In this regard, the cited portion of Lawlor (see Office Action, pp. 8-9) relates to operations occurring between a present frame and delay frames, not a single frame. For this further reason, claim 28 is patentable over Lawlor.

Dependent claim 31 is further patentable, as any encoding performed by Lawlor is done prior to replacing portions of a video frame. In this regard, any such replacing is performed in block 140 of FIG. 1, well after encoding is performed in block 110. For this further reason claim 31 is patentable.

Claims 12, 15 and 33 stand rejected under 35 U.S.C. §103(a) over Lawlor. For at least the reasons discussed above claims 12, 15 and 33 are patentable over Lawlor.

In view of these remarks, the application is now in condition for allowance and the Examiner's prompt action in accordance therewith is respectfully requested. The Commissioner is authorized to charge any additional fees or credit any overpayment to Deposit Account No. 20-1504.

Respectfully submitted,

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